

REMARKS

Upon entry of this amendment, claims 1-13 are all the claims pending in the application. Claims 14 and 15 have been canceled by this amendment.

Applicants note that a number of editorial amendments have been made to the specification for grammatical and general readability purposes. No new matter has been added.

I. Claim Rejections under 35 U.S.C. § 102

Claims 10, 11, 14 and 15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kato (EP Application No. 01304794.9, published as 1 182 880).

A. Claim 10

Claim 10 recites the features of a received data-separating unit operable to separate received data into two different pieces of encoded data and graphics data; and an encoding unit operable to individually encode each of the image data from the outside of said image processor, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit. Applicants respectfully submit that Kato does not disclose or suggest at least the above-noted combination of features recited in claim 10.

With respect to Kato, Applicants note that this reference discloses an image coding apparatus which includes a demultiplexer 12, a decoder 14, and an encoder 15 (see Fig. 3). As explained in Kato, the demultiplexer 12 separates the inputted data stream into a video stream and other streams (e.g., audio, still picture, character graphics, and multimedia coding data) (see paragraph [0074] and Fig. 3). In this regard, as shown in Fig. 3 of Kato, the video stream output

from the demultiplexer 12 is input to a decoder 14, whereby the decoded video data is output to the encoder 15, and is encoded on the basis of coding control information output from a coding controller 18 (see paragraph [0079]). In contrast, as shown in Fig. 3 of Kato, the other streams output from the demultiplexer 12 are not input to the decoder 14 or the encoder 15, but instead, are input directly to a multiplexer 16 (see paragraph [0079]).

In the Office Action, Applicants note that the Examiner has taken the position that the above-noted demultiplexer 12 of Kato corresponds to the claimed “received data-separating unit” because the demultiplexer separates the received data into a video stream and other streams (see Office Action at page 3), and that the above-noted encoder 15 of Kato corresponds to the claimed “encoding unit” (see Office Action at page 4). In this regard, however, Applicants note that the Examiner has also taken the position in the Office Action that the demultiplexer 12 of Kato corresponds to the claimed “encoding unit” (see Office Action at page 5).

Applicants respectfully submit that the above-noted positions taken by the Examiner are contradictory, and therefore, that the rejection of claim 10 should be withdrawn.

In particular, Applicants note that it is improper for the Examiner to interpret the demultiplexer 12 of Kato as corresponding to both of the claimed “received data-separating unit” and the “encoding unit”, while at the same time, interpreting the encoder 15 of Kato as also corresponding to the claimed “encoding unit”. Further, Applicants note that while the demultiplexing unit 12 of Kato separates the video stream from the other streams, that the demultiplexing unit 12 of Kato does not encode graphics image data.

With respect to the encoder 15 of Kato, Applicants note that while this element encodes the video data from the decoder 15 and the video coding control information from the coding controller 18, that the encoder 15 of Kato does not individually encode each of image data from the outside of said image processor, decoded data from said decoding unit, and graphics image data from said graphics-generating unit, as recited in claim 10

In view of the foregoing, Applicants respectfully submit that Kato does not disclose, suggest or otherwise render obvious at least the above-noted combination of features recited in claim 10 of a received data-separating unit operable to separate received data into two different pieces of encoded data and graphics data; and an encoding unit operable to individually encode each of the image data from the outside of said image processor, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit.

Accordingly, Applicants submit that claim 10 is patentable over Kato, an indication of which is kindly requested.

B. Claim 11

Claim 11 recites the feature of an encoding unit operable to individually encode each of the image data from the outside of said image processor and the decoded data from said decoding unit, thereby providing encoded data. Applicants respectfully submit that Kato does not disclose or suggest at least the above-noted feature recited in claim 11.

In particular, regarding Kato, as described above, the encoder 15 of Kato encodes the decoded video data output by the decoder 14 and the video coding control information output by the coding controller 18 (see Fig. 3).

Thus, while the encoder 15 of Kato encodes decoded data from the decoder 14, Applicants respectfully submit that the encoder 15 of Kato does not encode image data from the outside of said image processor. In other words, Applicants respectfully submit that the video coding control information of Kato is not image data from outside of an image processor, but instead, is merely control information that is output from the coding controller 18.

In view of the foregoing, Applicants respectfully submit that Kato does not disclose, suggest or otherwise render obvious at least the above-noted feature recited in claim 11 of an encoding unit operable to individually encode each of the image data from the outside of said image processor and the decoded data from said decoding unit, thereby providing encoded data. Accordingly, Applicants submit that claim 11 is patentable over Kato, an indication of which is kindly requested.

C. Claims 14 and 15

Regarding claims 14 and 15, as noted above, these claims have been canceled by the present amendment.

II. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-9, 12 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato (EP Application No. 01304794.9, published as 1 182 880) in view of Lavalley (US 6,215,904).

A. Claims 1 and 9

Claim 1 recites the feature of an encoding unit operable to individually encode each of the image data from said image input unit, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit. Applicants respectfully submit that Kato and Lavallee do not teach or suggest at least the above-noted feature recited in claim 1.

Regarding Kato, Applicants note that in the Office Action, the Examiner has taken the position that the encoder 15 of Kato encodes the decoded data from the decoder 14 and graphics image data output from the demultiplexer 12 (see Office Action at page 8). Applicants respectfully disagree.

In particular, Applicants note that while the encoder 15 of Kato encodes decoded video data output from the decoder 14, that the other streams output from the demultiplexer (e.g., still picture, character graphics data, and multimedia coding data) bypass the encoder 15, and are directly input to the multiplexer 16 (see Fig. 3). Accordingly, Applicants respectfully submit that the above-noted position taken by the Examiner is incorrect, and therefore, kindly request that the above-noted rejection be reconsidered and withdrawn.

In addition, regarding Lavallee, Applicants note that this reference discloses an apparatus for selecting an encoding scheme, wherein the apparatus includes a control unit 180, a memory 190, a text data encoder 170 and a pictorial data encoder 140 (see Fig. 1). In the Office Action, the Examiner has taken the position that the encoding units of Lavallee individually encode image data from an image input unit 110 (see Office Action at page 9).

With respect to this position taken by the Examiner, Applicants point out that claim 1 recites that feature of an encoding unit operable to individually encode each of the image data

from said image input unit, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit. In other words, according to claim 1, Applicants note that there is one shared encoding unit that individually encodes each of the above-noted data.

In this regard, Applicants note that even if one of ordinary skill in the art was to combine Lavallee with Kato, as suggested by the Examiner, that such a combination would result in a plurality of encoding units which encode different data, rather than one shared encoding unit for different types of data (i.e., the image data from said image input unit, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit).

In view of the foregoing, Applicants respectfully submit that the Kato and Lavallee do not teach, suggest or otherwise render obvious at least the above-noted feature recited in claim 1 of an encoding unit operable to individually encode each of the image data from said image input unit, the decoded data from said decoding unit, and the graphics image data from said graphics-generating unit. Accordingly, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested. Claim 9 depends from claim 1 and is therefore considered patentable at least by virtue of its dependency.

B. Claims 2 and 3

Claim 2 recites the feature of an encoding unit operable to individually encode each of the image data from said image input unit and the decoded data from said decoding unit, thereby providing encoded data. Applicants respectfully submit that Kato and Lavallee do not teach or suggest at least the above-noted feature recited in claim 2.

With respect to the above-noted feature, Applicants note that the Examiner has taken the position that the encoder 15 of Kato encodes decoded data from the decoder 14, and that the encoding unit 140 of Lavallee encodes image data from an image input unit (see Office Action at pages 11-12).

Regarding this position, Applicants point out that claim 2 recites that feature of an encoding unit operable to individually encode each of the image data from said image input unit and the decoded data from said decoding unit, thereby providing encoded data. In other words, according to claim 2, Applicants note that there is one shared encoding unit that individually encodes each of the above-noted data.

In this regard, Applicants note that even if one of ordinary skill in the art was to combine Lavallee with Kato, as suggested by the Examiner, that such a combination would result in a plurality of encoding units which encode different data, rather than one shared encoding unit for different types of data (i.e., the image data from said image input unit and the decoded data from said decoding unit).

In view of the foregoing, Applicants respectfully submit that the Kato and Lavallee do not teach, suggest or otherwise render obvious at least the above-noted feature recited in claim 2 of an encoding unit operable to individually encode each of the image data from said image input unit and the decoded data from said decoding unit, thereby providing encoded data. Accordingly, Applicants submit that claim 2 is patentable over the cited prior art, an indication of which is kindly requested. Claim 3 depends from claim 2 and is therefore considered patentable at least by virtue of its dependency.

C. Claim 4

Claim 4 recites the features of a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from said image input unit, thereby providing selected data; and an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data.

In the Office Action, the Examiner has recognized that Kato does not disclose or suggest the above-noted features recited in claim 4 (see Office Action at page 16). The Examiner, however, has taken the position that Lavallee cures this deficiency of Kato (see Office Action at page 17). Applicants respectfully disagree.

With respect to Lavallee, Applicants note that the Examiner has taken the position that the control unit 180 of Lavallee corresponds to the claimed “selecting unit”, and that encoders 140 and 170 of Lavallee correspond to the claimed “encoding unit”. Regarding this position, Applicants note that the control unit 180 of Lavallee selects data for storing into the memory 190 after encoding is performed by encoder 140 or encoder 170 (see col. 4, lines 45-59).

Thus, in Lavallee, encoding is performed by the encoder 140 or 170, and thereafter, the control unit 180 selects data for storing into the memory 190. In contrast, Applicants note that the selecting unit according to claim 4 selects data in response to a control signal, and the encoding unit encodes the selected data from the selecting unit.

Accordingly, because the selected data in Lavallee is not output to be encoded, but instead, is merely stored in the memory 190, Applicants respectfully submit that Lavallee does

not disclose, suggest or otherwise render obvious the features of a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from said image input unit, thereby providing selected data; and an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data, as recited in claim 4.

Accordingly, Applicants submit that claim 4 is patentable over the cited prior art, an indication of which is kindly requested.

In addition, Applicants note that claim 4 recites that said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data. Regarding this feature, as noted above, the Examiner has taken the position that the encoders 140 and 170 of Lavallee correspond to the claimed “encoding unit”, and that the control unit 180 of Lavallee corresponds to the claimed “selecting unit”.

In this regard, however, as described above, in Lavallee, encoding is performed by the encoder 140 or 170, and thereafter, the control unit 180 selects data for storing into the memory 190.

Accordingly, because the selected data in Lavallee is not output to be encoded, but instead, is merely stored in the memory 190, Applicants respectfully submit that Lavallee does not disclose, suggest or otherwise render obvious the above-noted feature of claim 4 which indicates that said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data.

In view of the foregoing, Applicants respectfully submit that Kato and Lavallee do not teach, suggest or otherwise render obvious at least the above-noted combination of features recited in claim 4. Accordingly, Applicants submit that claim 4 is patentable over the cited prior art, an indication of which is kindly requested.

D. Claims 5-8, 12 and 13

Claim 5 recites the features of a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from said image input unit, thereby providing selected data; an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data; wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data.

Regarding the above-noted features, Applicants note that the Examiner has taken the position in the Office Action that the control unit 180 of Lavallee corresponds to the claimed “selecting unit”, and that the encoders 140 and 170 of Lavallee correspond to the claimed “encoding unit” (see Office Action at page 21).

For at least similar reasons as described above with respect to claim 4, Applicants respectfully disagree with the Examiner’s position, and submit that combination of Kato and Lavallee does not teach or suggest at least the above-noted combination of features recited in claim 5. Accordingly, Applicants submit that claim 5 is patentable over the cited prior art, an

indication of which is kindly requested. Claims 6-8 depend from claim 5 and are therefore considered patentable at least by virtue of their dependency.

Regarding claims 12 and 13, Applicants note that these claims recite the features of a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from outside of said image processor, thereby providing selected data; an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data; wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data.

For at least similar reasons as described above with respect to claim 4, Applicants respectfully submit that combination of Kato and Lavallee does not teach or suggest at least the above-noted combination of features recited in claims 12 and 13. Accordingly, Applicants submit that claims 12 and 13 are patentable over the cited prior art, an indication of which is kindly requested.

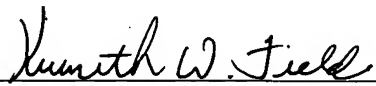
III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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